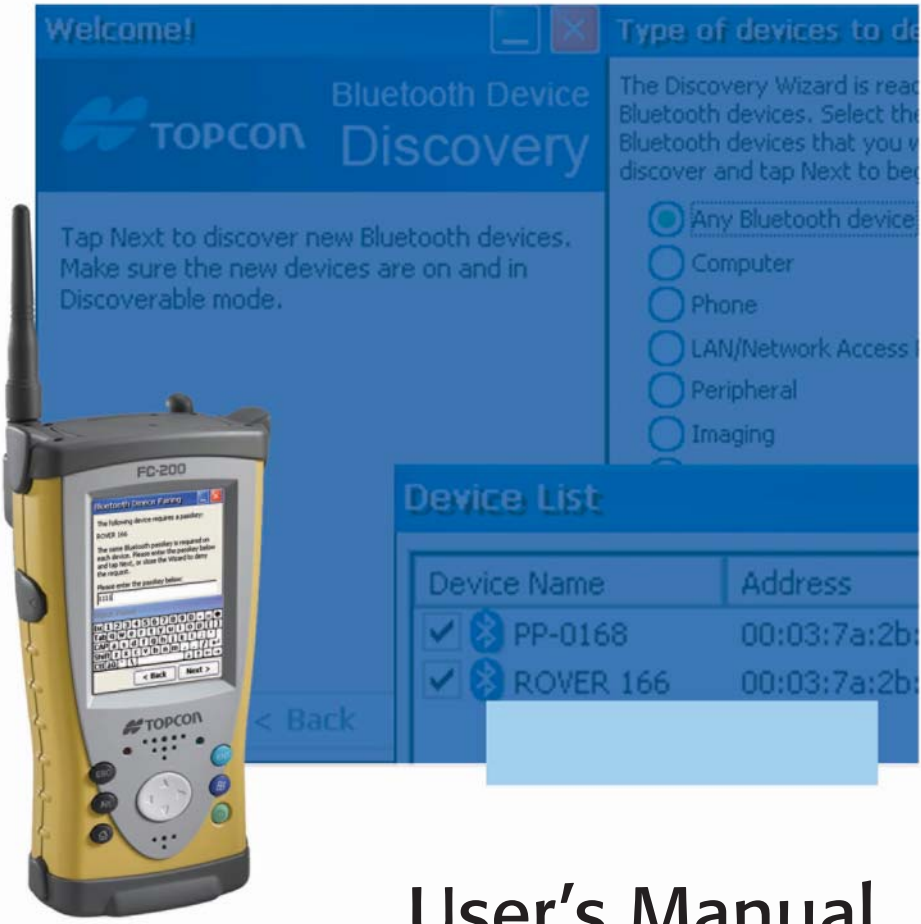
FC-200 CE.Net Bluetooth® Manager



User's Manual

TOPCON
POSITIONING SYSTEMS

FC-200 CE.Net Bluetooth® Manager User's Manual

Part Number **7010-0833**
Rev **A**

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Manual Conventions

This manual uses the following conventions:

Example	Description
File ▸ Exit	Click the **File** menu and click **Exit**.
Connection	Indicates the name of a dialog box or screen.
Frequency	Indicates a field on a dialog box or screen, or a tab within a dialog box or screen.
Enter	Press or click the button or key labeled **Enter**.

Further information to note about the configuration, maintenance, or setup of a system.

Supplementary information that can help you configure, maintain, or set up a system.

Supplementary information that can have an affect on system operation, system performance, measurements, or personal safety.

Notification that an action has the potential to adversely affect system operation, system performance, data integrity, or personal health.

Notification that an action *will* result in system damage, loss of data, loss of warranty, or personal injury.

Under no circumstances should this action be performed.

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Getting Started with Bluetooth Manager

This manual describes Bluetooth® Manager (BTManager) 2.0 used on the Topcon field controller FC-200 with the CE.Net operating system.

The BTManager utility controls the FC-200 Bluetooth module.

Starting Bluetooth Manager

To start the BTManager:

1. Turn on the FC-200.
2. Tap the Bluetooth icon in the system tray, and select **Bluetooth Manager** from the pop-up menu.

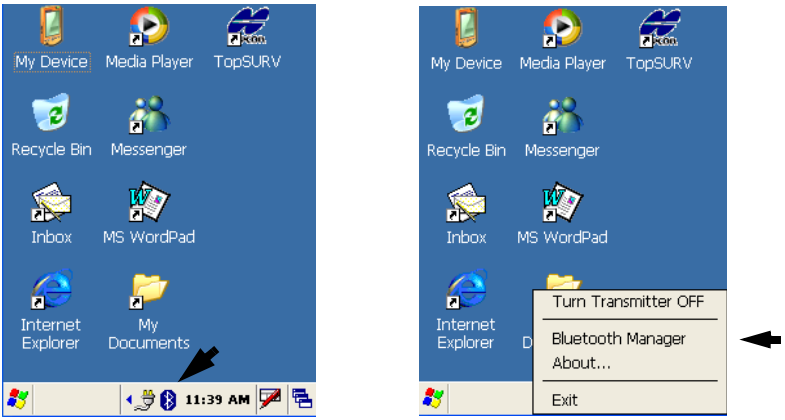


Figure 1-1. Starting Bluetooth Manager

3. If the Bluetooth transmitter is switched off (the menu item is gray), select **Turn Transmitter On** to turn on Bluetooth.

Getting Acquainted

Table 1-1 summarizes the screens and settings in BTManager,

Table 1-1. BTManager Screens

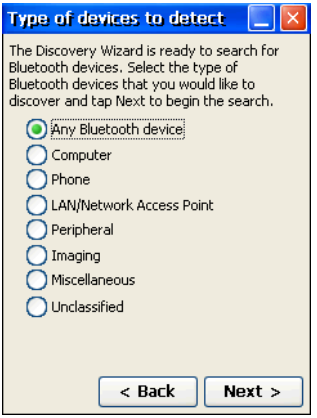
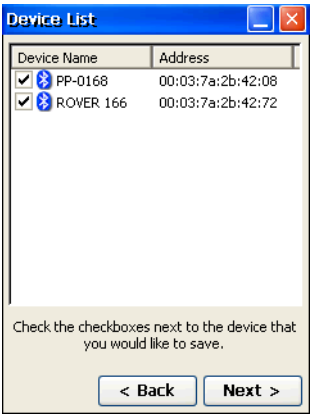
Description	Screen
Type of devices to detect This screen displays types of devices to pair with. Once a device type is selected, the *Discovery Wizard* searches for those devices when you tap **Next.**	
Device List This screen displays all discovered devices of a selected type. From this list, you can choose a device to pair with and add it to your *List of Favorite Devices* by tapping **Next**.	

Table 1-1. BTManager Screens (Continued)

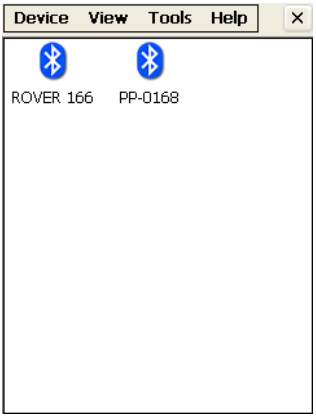
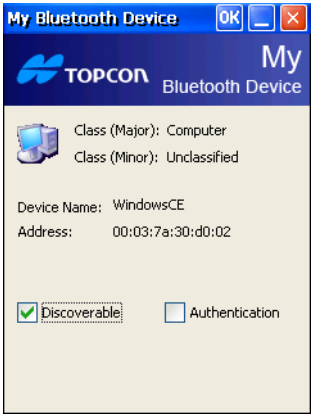
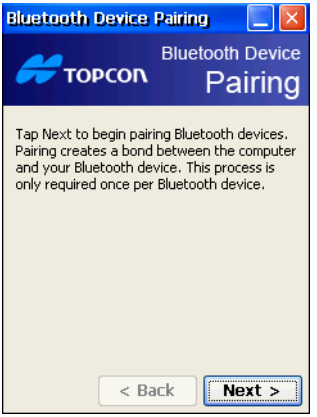
Description	Screen
List of Favorite Devices This screen displays your preferred Bluetooth-enabled devices to pair with. Selecting a device and tapping **View ▸ Details** displays detailed information about that device.	
My Bluetooth Device This screen displays the internal FC-200 Bluetooth module information. Enabling **Discoverable** allows other devices to detect your FC-200. Enabling **Authentication** confirms the identity of other devices trying to pair with your FC-200.	

Table 1-1. BTManager Screens (Continued)

Description	Screen
Bluetooth Device Pairing This screen prompts the *Wizard* to search for the device you have selected to pair with when you tap **Next.**	
About BTManager This screen displays version and copyright information for the BTManager.	

Using Bluetooth Manager

Before the FC-200 can pair with another Bluetooth-enabled device, it must discover which devices are available within your coverage area. You can then add these devices to the *List of Favorite Devices*. Upon first opening the BTManager, the *List* is empty.

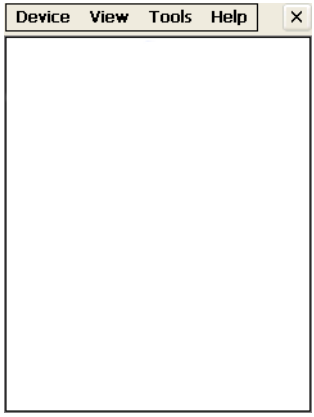


Figure 2-1. List of Favorite Devices

Discovering Devices

To discover other Bluetooth-enabled devices within your coverage area:

1. Tap **Tools ▸ Device Discovery.**

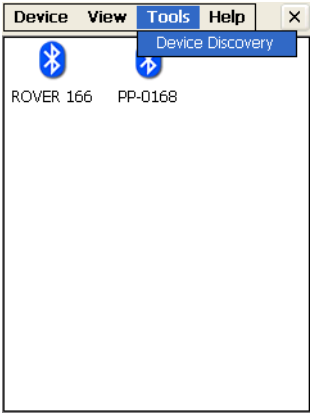


Figure 2-2. Tools menu - Device Discovery

The *Discovery Wizard* appears (Figure 2-1).

Welcome!
TOPCON
Bluetooth Device
Discovery
Tap Next to discover new Bluetooth devices. Make sure the new devices are on and in Discoverable mode.
< Back
Next >

Figure 2-3. Discovery Wizard

2. Tap **Next** to display a list of device types.

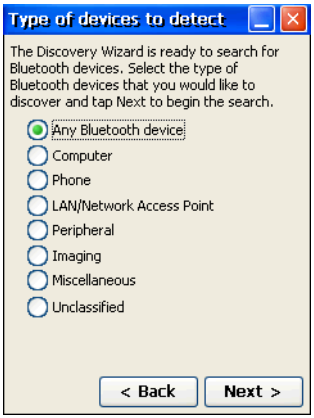

Type of devices to detect
The Discovery Wizard is ready to search for Bluetooth devices. Select the type of Bluetooth devices that you would like to discover and tap Next to begin the search.
Any Bluetooth device
Computer
Phone
LAN/Network Access Point
Peripheral
Imaging
Miscellaneous
Unclassified
< Back
Next >

Figure 2-4. Device Types

3. Choose a type of devices to discover, and tap **Next**.

   The *Discovery Wizard* searches for Bluetooth-enabled devices in your coverage area and displays the icons of the devices it discovers on the ***Device List***.

   As device names and addresses are retrieved, the *Device List* updates with detailed information.

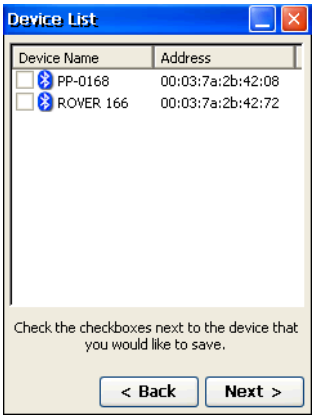


Figure 2-5. Discovered Devices

Once the *Device List* is populated, you can add any device from this list to the *List of Favorite Devices*.

Adding to the List of Favorite Devices

The *Devices List* displays all discovered Bluetooth-enabled devices in your coverage area.

To add a device from the *Devices List* to the *List of Favorite Devices*:

1. Select a device, and tap **Next**. You can choose more than one device.

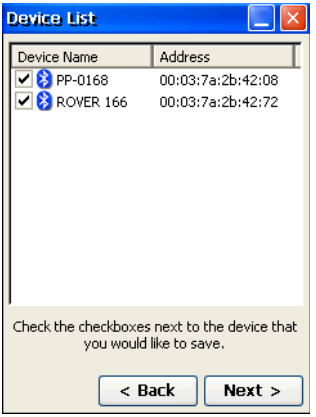


Figure 2-6. Select Device(s)

A confirmation message appears when the devices are successfully added to the *List of Favorite Devices.*

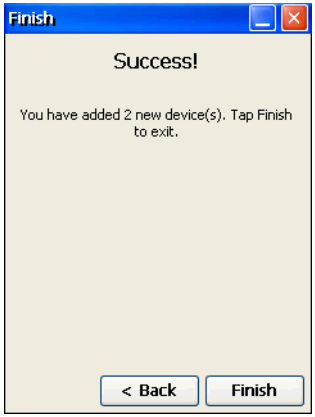


Figure 2-7. Devices Added

2. Tap **Finish** to exit the *Wizard* and display the *List of Favorite Devices.*

The *List of Favorite Devices* shows all devices your FC-200 is currently paired with. You can view devices by icon and name or by name and address.

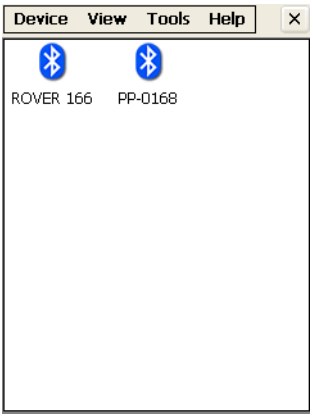


Figure 2-8. Bluetooth Devices Folder - Name and Icon View

To display the list of devices by name and address, tap **View ▸ Details**.

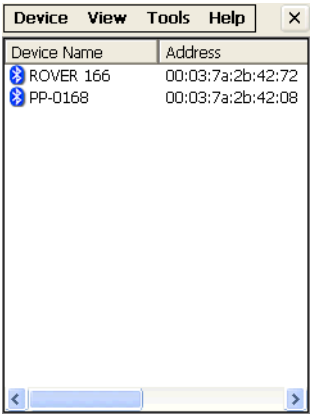


Figure 2-9. Bluetooth Devices Folder - Name and Address View

Viewing Device Properties

To view the properties of a device, select the device in the *List of Favorite Devices,* and tap **Device ▸ Properties.**

The ***Bluetooth Device Properties*** screen displays major and minor class identifiers, the name, and address of the selected device. The screen also shows the services supported by the device. Depending on the device type, the supported services can include Limited,

Positioning, Networking, Rendering, Capturing, Object_XFER, Audio, Telephony, and Information.

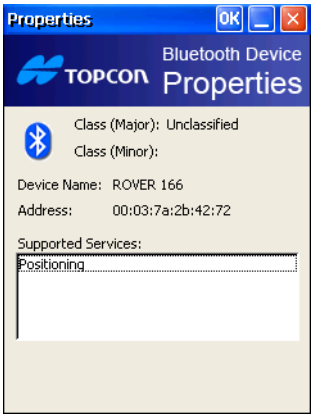


Figure 2-10. Bluetooth Device Properties

Deleting a Device from the List

To delete a device from the *List of Favorite Devices*:

1. Select the device, and tap **Device** ▸ **Delete**.
   A confirmation message appears.
2. Tap **Yes** to delete the device.

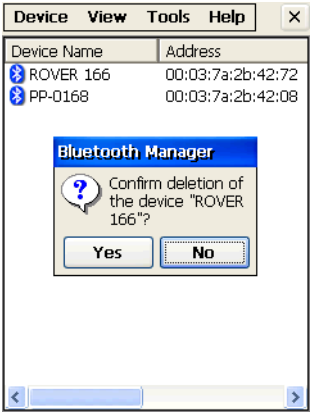


Figure 2-11. Deleting a Device

Choosing Device Accessibility

To select accessibility settings for the internal FC-200 Bluetooth Module, tap **Device ▸ My Bluetooth Device**.

The ***My Bluetooth Device*** screen displays information about the internal FC-200 Bluetooth module and if external devices can discover/pair with it.

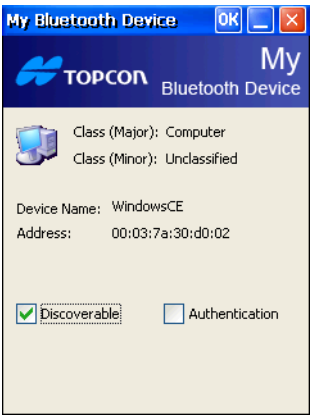


Figure 2-12. My Bluetooth Device

My Bluetooth Device always displays the following information:

- Class (major and minor)
- Name (Other devices use this name to identify the FC-200.)
- Address

This screen also allows you to enable the following accessibility options:

- *Discoverable:* allows other devices to find the FC-200
- *Authentication*: authenticates the identity of other devices

BTManager allows the FC-200 to connect with other Bluetooth-enabled devices using serial port or dial-up services:

- SPP (Serial Port Profile): provides serial port connection with peripheral Bluetooth-enabled devices, including GPS receivers which normally do not require authentication.

- DUN (Dial-up Networking Profile): provides a standard to access dial-up services over Bluetooth. The most common scenario is connecting to a phone.

Pairing Bluetooth Devices

Pairing establishes communication between devices by exchanging PINs and addresses. Once communication is established and authentication occurs, these devices become "trusted" devices and will no longer have to authenticate for future connections. The *List of Favorite Devices* displays all of the discovered Bluetooth-enabled devices your FC-200 can pair with.

To pair with a Bluetooth-enabled device from the *List of Favorite Devices*:

1. Select the device, and tap **Device ▸ Pair**.

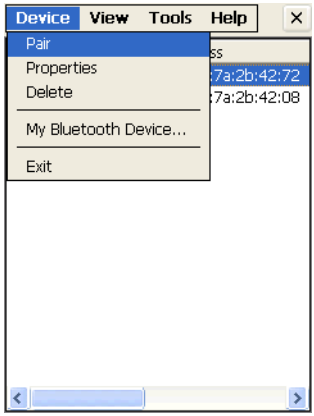


Figure 2-13. Device Menu - Pair

   The *Pairing Wizard* appears to guide you through the pairing process.

2. Tap **Next** to continue.

The *Wizard* searches for the other device.

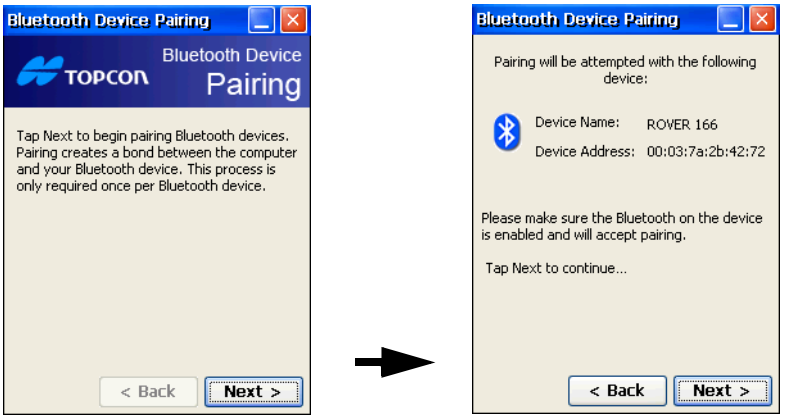

Bluetooth Device Pairing
TOPCON
Bluetooth Device Pairing
Tap Next to begin pairing Bluetooth devices. Pairing creates a bond between the computer and your Bluetooth device. This process is only required once per Bluetooth device.
< Back
Next >
Bluetooth Device Pairing
Pairing will be attempted with the following device:
Device Name: ROVER 166
Device Address: 00:03:7a:2b:42:72
Please make sure the Bluetooth on the device is enabled and will accept pairing.
Tap Next to continue...
< Back
Next >

Figure 2-14. Pairing with Remote device

When the *Wizard* discovers the other Bluetooth-enabled device, you are prompted to enter a passkey (PIN) for authentication. The same passkey must be entered on both devices to establish authentication and pairing. Authentication is only required the first time the two devices pair.

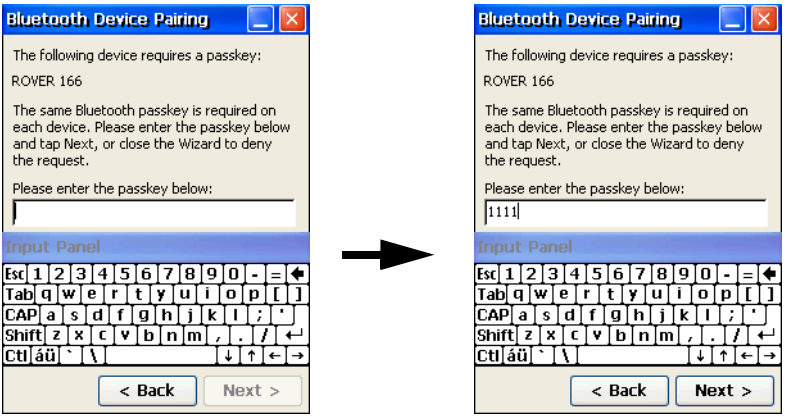

Bluetooth Device Pairing
The following device requires a passkey:
ROVER 166
The same Bluetooth passkey is required on each device. Please enter the passkey below and tap Next, or close the Wizard to deny the request.
Please enter the passkey below:
Input Panel
< Back
Next >
Bluetooth Device Pairing
The following device requires a passkey:
ROVER 166
The same Bluetooth passkey is required on each device. Please enter the passkey below and tap Next, or close the Wizard to deny the request.
Please enter the passkey below:
1111
Input Panel
< Back
Next >

Figure 2-15. Enter Passkey (PIN)

3. Enter a passkey, and then tap **Next**.

4. If the passkey on the remote device is changed or revoked, an error message appears. Tap **OK** to change the current passkey.

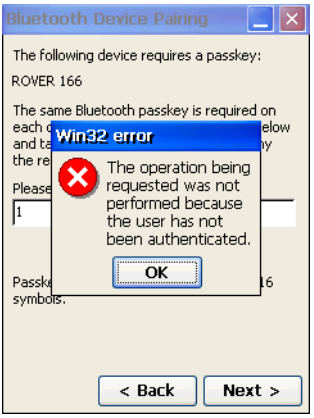

Bluetooth Device Pairing
The following device requires a passkey:
ROVER 166
The same Bluetooth passkey is required on
Win32 error
The operation being requested was not performed because the user has not been authenticated.
OK
< Back
Next >

Figure 2-16. Change Current Passkey

A congratulation message appears when the pairing is successful.

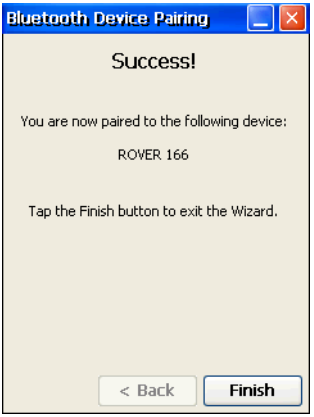


Figure 2-17. Successful Pairing

5. Tap **Finish** to exit the *Wizard*.

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